WATER RESOURCES RESEARCH GRANT PROPOSAL

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Title: Science, Development & Public Opinion

Project Type: Research

Focus Categories: Groundwater, Law, Institutions, and Policy, Education

Keywords: Arbuckle-Simpson Aquifer, Oklahoma Water

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Congressional District: 3rd

Principal Investigators:
Beth Caniglia

Marc Krein

Abstract

Purpose

• To collect benchmark public opinion data from relevant representatives of citizen groups, public agencies and legislators toward: development trajectories of the Arbuckle-Simpson aquifer, the present moratorium on permits for extra-county use of Arbuckle-Simpson groundwater resources (Senate Bill 288); and the Arbuckle-Simpson Aquifer Hydrogeology Study being conducted by the Oklahoma Water Resources Board • To systematically assess over time the impact of the Arbuckle-Simpson Aquifer Hydrogeology Study on public opinion in the above mentioned areas • To assess the ultimate impact of the Arbuckle-Simpson Aquifer Hydrogeology Study on groundwater law in the State of Oklahoma Project Description In May 2004, the Oklahoma State Legislature passed Senate Bill 288, which places a moratorium on the issuance of temporary permits that would result in the usage of water from a “sensitive sole source” aquifer outside of its home county, until a scientific study is conducted by the Oklahoma Water Resources Board (OWRB). The purpose of the OWRB study is to approve “a maximum annual yield that will ensure that any permit for the removal of water from a

sensitive sole source groundwater basin or subbasin will not reduce the natural flow of water from springs or streams emanating from said basin or subbasin" (ENR. S. B. NO. 288). Senate Bill 288 may add a new provision to Oklahoma's water law, and that possibility has motivated unprecedented activist engagement targeted at OWRB. Literally thousands of public comment letters have poured into OWRB offices. One lawsuit, which was filed just hours after passage of the Bill, resulted in a ruling that the Bill is constitutional, although there are expectations that there will be an appeal by landowners who want to sell water to municipalities in Canadian County. The adjudication of cross-county water transfer permits hinges upon science. Following the impact of this hydrological study is of intellectual import. Environmental policy is frequently based upon natural science. While natural science is often billed as the central determinant in environmental policy decision-making, sociologists argue that the impact of policy science studies varies based on several factors including: the extent to which findings and predictions are certain (Mayo & Hollander 1991), the extent to which the scientific processes and findings are clearly communicated to various publics, and the extent to which relevant authorities possess political capacity and will to enact the recommendations of scientists. To date, we have been unable to find extant systematic studies within the sociology of science, technology and environment that empirically measure the impact of policy science from its inception to its policy conclusions. The current study is designed to fill this gap. By systematically examining the impact of information related to the OWRB study on public opinion and legislative decisions, our research will provide an empirically informed model of the role of science in the formation of environmental policy in the Arbuckle-Simpson case. This longitudinal study will follow the impact of a scientific study being conducated by the Oklahoma Water Resources Board until its completion. The project assembles baseline public opinion data from newspaper articles, public comment letters and in-depth semi-structured interviews. These baseline data account for public opinion toward the Arbuckle-Simpson aquifer prior to the release of significant scientific findings from the Oklahoma Water Resources Board. These baseline data will be used to compare with subsequent data collected to analyze public opinion change over time. The resulting data will provide important insights into the role of science in the adjudication of groundwater policy in the Arbuckle-Simpson case. In the final analyses, we hope to discern the ultimate impact of science on Oklahoma groundwater law.